

Appl. No. 10/020,334
Amendment dated April 30, 2004
Reply to Office Action of February 13, 2004

Amendments to the Specification

✓
Please replace the Abstract on page 32, with the following rewritten Abstract:

A1
A method for and selective call communications unit (CU) arranged and constructed for extended battery life includes a first receiver having low power consumption, preferably operating ~~an~~ on a duty cycle, for receiving a call signal to provide an enable signal, in one aspect conditioned on a match of a selective call address to an address for the CU; and a messaging receiver, activated by the enable signal, for receiving a message intended for the CU. These methods can result in a battery life for the CU approaching a shelf life of the battery.

✓
Please replace the paragraph beginning on page 10 line 17, with the following rewritten paragraph:

A2
The controller is shown with an input output (I/O) 223 that provides an appropriate and known interface to a user or other device that utilizes the messaging unit and this may include keys, display apparatus, sensors, actuators, or ports as needed. The controller 221 will include some combination (none specifically shown) of a processor and memory and interface circuitry as required. The processor will ordinarily include a general purpose microprocessor and a digital signal processor that are widely available from manufacturers such as Motorola and Texas Instruments. The memory is, preferably, comprised of a combination of RAM (Random Access

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Memory), ROM (Read Only Memory), PROM (Programmable Read Only Memory),

a² and rarely magnetic memory all as is known. The memory will include software instructions and parameters that when executed and utilized by the processor causes the controller to control the receiver and transmitter and I/O to receive and send (including coding, modulation, equalization, and the like) signals from other WCUs SCUs in accordance with the protocols and other operational conventions that will depend on the particular application, system, or network.

Please replace the paragraph beginning on page 11 line 12, with the following rewritten paragraph:

a³ The SCU 200 and specifically low power receiver 201 although depicted using a preferred super regenerative receiver can also utilize a regenerative receiver or a tuned radio frequency (RF) receiver or in other variations an ultrasonic receiver, or passive receiver and the corresponding techniques. These types of receivers are known in various forms. The super regenerative receiver will be discussed further with reference to FIG. 3 below. The regenerative receiver is a variation of that where operating with many of the same principles but ordinarily has slightly higher power consumption or current drain with possibly lower cost. The regenerative receiver, in comparison to the super regenerative receiver, also suffers from low sensitivity and the need for careful tuning of the regeneration control, which makes user-friendly operation more difficult. As is known in the art, both receivers are capable of receiving AM (Amplitude Modulation) and FM (Frequency Modulation) transmissions making them useful in

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a3
many applications. For example, both of these receivers have been used in keyless entry systems and garage door openers.

Please replace the paragraph beginning on page 15 line 1, with the following rewritten paragraph:

a4
The messaging receiver for the SCU 200 is preferably a super heterodyne (SH) receiver but could as well be a zero or low intermediate frequency receiver, or a delay line receiver. The super heterodyne receiver as is known is one where the carrier signal frequency is translated one or more times to a lower intermediate (IF) frequency where the modulation on the carrier, now IF, signal is recovered. The zero or low IF frequency receiver is a form of SH receiver, wherein the carrier frequency is translated to or near to a zero IF frequency signal. The delay line receiver is a variant of the ~~tuned~~ tuned RF receiver, in which multiple tuned RF amplification stages are separated by delay structures, usually surface acoustic wave (SAW) devices. The RF stages are activated in sequence with the arriving signal, thereby amplifying it. However, since no two stages are active at any one time the stability problem of the tuned RF receiver is overcome (at the expense of added SAW devices).

Please replace the paragraph beginning on page 17 line 12, with the following rewritten paragraph:

a5
As a brief review we have discussed and described a selective call communications unit that is arranged and constructed for extended battery life. The

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05
SCU includes a first receiver having low power consumption for receiving a call signal to provide an enable signal; a messaging receiver, activated by the enable signal, for receiving a message intended for the selective call communications unit; and optionally a transmitter, activated by the enable signal for responding to the message. The SCU includes a battery based power supply for powering the first receiver, the messaging receiver, and the transmitter wherein an expected battery life is on the order of a shelf like life for a battery included in the battery based power supply.

Please replace the paragraph beginning on page 22 line 7, with the following rewritten paragraph:

06
Various embodiments of methods and apparatus for providing or facilitating the providing of services in a communications network in a battery efficient manner have been discussed and described. It is expected that these embodiments or others in accordance with the present invention will have application to paging and messaging systems as well as many wireless local area networks that provide connectivity for devices or communications units as well as such networks that are coupled to fixed or wired WANS WANs (Wide Area Networks) such as the PSTN (Public Switched Telephone Network) or internet. The disclosure extends to the constituent elements or equipment comprising such systems and specifically the methods employed thereby and therein. Using the inventive principles and concepts disclosed herein advantageously allows or provides for low latency and long battery life which will be beneficial to users and providers of communications services.
